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MASTER OF MILITARY STUDIES

TITLE: Relevance of Defense Spending after the 1973-1975 Recession to Defense Spending
Following the Great Recession of 2007-2009.

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Executive Summary

Title: Relevance of Defense Spending after the 1973-1975 Recession to Defense Spending Following the Great Recession of 2007-2009.

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Thesis: Current decision makers and planners should study the spending decisions made in the wake of previous recessions in order to garner lessons for the current fiscally austere environment. Recent reductions to military personnel budgets risk re-creating the hollow force while procurement reductions seeking to deliver a peace dividend may leave services ill equipped while RDT&E cuts threaten the military's ability to develop the tools needed for future missions. In the aftermath of extended conflicts, major recessions, and constraints on defense, spending three major areas where current planners can draw informative parallels from the historical record are military personnel, procurement, and research, development, test, and evaluation (RDT&E).

Discussion: In the current, austere economic climate, the Department of Defense is the target of significant budget reductions to save money. This situation is one that America and the DOD have experienced before. The national economy was damaged by the 1973-1975 recession, the Great Stagflation, and in the aftermath of Vietnam defense spending was reduced significantly. Today America has finished operations in Iraq and is withdrawing from Afghanistan. Additionally, the national economy is still unstable in the aftermath of the 2007-2009 recession, the Great Recession. As decision makers consider how to adjust to reductions in the defense budget, spending on military personnel, procurement, and RDT&E the period 1974-1978 provides an informative historical situation. Defense spending from 2008-2012 shows that America is currently on a similar trajectory to that the period and the era from 1974-1978 should be studied closely to determine what negative consequences those decisions had and how to avoid repeating a past mistake.

Conclusion: There are many significant similarities between 1974-1978 and 2009-2012. The current economic austerity and the DOD's alignment to financial constraints should consider the decisions made in the aftermath of Vietnam and the Great Stagflation. Facing at least a 10% budget reduction over 10 years the DOD will have to balance supporting national interests with less money to spend on three areas that are integral to this support; military personnel, procurement, and RDT&E.

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Preface

First and foremost a thousand thanks to Carolina and Isabel. Thank you both for your love and understanding through all the nights and weekends spent at the library when homework and papers seemed to occupy all my time. This has been and will continue to be an incredible year for me and I am grateful that you have been with me throughout.

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Introduction

From 2007-2009, America underwent its worst economic period since the Great Depression. America is still recovering from this economic crisis and adjusting to a constrained economic reality. Currently, there is much debate regarding federal spending in this austere economic environment. As the largest discretionary aspect of the Federal budget, defense spending is the target of much of this scrutiny.¹ In his 2012 budget request, President Obama issued strategic guidance to the Department of Defense (DOD) to support national interests via a budget reduction of \$487 billion (10%) over the next ten years.² This directive aims to align DOD spending with the state of America's finances, anticipate the end of over a decade of war, and realize "the national security imperative of deficit reduction."³ When determining how to best synchronize DOD priorities with national interests in a constrained fiscal environment, the period from 1974-1978 shares many similarities with the period from 2008-2012 that make it a useful historical precedent. Just as when America was emerging from more than a decade of conflict in Vietnam and the worst recession since the Great Depression, the country finds itself in similar circumstances with a decade of war in both Iraq and Afghanistan and the Great Recession. Current reductions to military personnel budgets risk re-creating the hollow force while procurement reduction seeking to deliver a peace dividend may leave services ill equipped while research, development, test, and evaluation (RDT&E) cuts threaten the military's ability to develop the tools needed for future obligations. In the aftermath of extended conflicts, major recessions, and constraints on defense, three major areas where current DOD planners can draw informative spending parallels from the historical record are military personnel, procurement, and RDT&E. Congress and current DOD budget planners should study the spending decisions from 1974-1978 to inform the decisions they face in today's austere climate.

This study encompasses a five-year period from two eras, 1974-1978 and 2008-2012. Each period encompasses the defense budget from the first full year of each recession and extends to the defense budget for the third year after the recovery period. In the years studied, four budget authorities comprise at least 96% of the DOD budget – military personnel, operations and maintenance (O&M), procurement, and RDT&E. This paper will study three components of DOD budgets, documentation from testimony before the Senate, DOD official publications, and federal budgets from both periods. The first component addressed is military personnel, that portion of the budget requesting funds for uniformed service members. DOD civilian budget authorities are a component of operations and maintenance.⁴ The second component is procurement, the budget authority used to fund acquisition of equipment and services. The third is research, development, testing, and evaluation (RDT&E). The RDT&E budget funds basic and applied research and development of new technologies and systems.

The other most sizeable component of defense spending is the O&M budget. O&M was the second largest DOD budget component from 1973-1978. From 2008-2012, the largest component of defense spending is O&M. However, O&M is a function of the three budget functions this paper will examine and therefore was not included in this study. The assets acquired via defense spending on military personnel, procurement, and RDT&E are the driving force for O&M spending. “O&M appropriations traditionally finance those things whose benefits are derived for a limited period of time, i.e., expenses, rather than investments.”⁵ These expenses range from civilian salaries to facility upkeep and basic supplies such as fuel. As such, the money spent on O&M is dependent on the results of other funding lines and excluded from this study. This paper examines the testimony before the Senate Armed Services Committee and DOD publications from each era to identify the DOD climate and the concerns of DOD and

Congressional officials. Justifying the similarities between these two eras along defense spending components will prove the need for DOD budget planners and members of Congress to consider the debates and budgetary decisions from 1974-1978 as they adjust to the current fiscally constrained environment.

When reviewing any DOD budgetary documentation two key terms are budgeting authority (BA) and total outlay. “Budgeting Authority is the authority provided by law for agencies to obligate the Government to spend.”⁶ “Outlays are the amount of money spent each year.”⁷ In relation to the DOD, BA is the money Congress authorizes for a specific service or product while outlay is the money DOD actually spends on a service or product. Within the national budget construct, the budget for national defense is the all-encompassing authority. The DOD-Military budget falls under this authority and is the overarching budget authority for the three funding lines studied in this paper.

This paper will begin by establishing the context and impacts of the 1973-1975 recession and the 2007-2009 recession as well as the validity of 1973-1975 as an historically relevant event to the 2007-2009 recession. The recessions studied set the national economic context for defense spending decisions, which this paper will highlight using the gross domestic product (GDP) as the economic baseline. The constrained economic environment is the setting for reductions in defense spending as America reduced overseas commitments in Vietnam, Iraq, and Afghanistan. Second, this paper will examine defense spending from each period using the military personnel, procurement, and RDT&E components of the defense budget relative one another, to the national economy, and the total budget for national defense. This paper concludes with the importance of defense spending after the 1973-1975 recession as an historical situation whose budgetary decisions across the three areas studied significantly affected the DOD. Due to the austere fiscal

environment after the 2007-2009 recession DOD funding is again facing major reductions and current budget planners should consider the impacts of the previous drawdown as they implement the new one.

Comparing Recessions

The Bureau of Economic Analysis (BEA) identifies the National Bureau of Economic Research (NBER) as the official designator of American recessions (Table 1). The NBER defines a recession as “a significant decline in economic activity spread across the economy, lasting more than a few months, normally visible in real GDP, real income, employment, industrial production, and wholesale-retail sales.”⁸

Table 1 – American Recessions Since WWII

US Business Cycle Expansions and Contractions							
<i>Peak month</i>	<i>Trough month</i>	<i>Peak month number</i>	<i>Trough month number</i>	<i>Duration, peak to trough</i>	<i>Duration, trough to peak</i>	<i>Duration, peak to peak</i>	<i>Duration, trough to trough</i>
November 1948	October 1949	1787	1798	11	37	45	48
July 1953	May 1954	1843	1853	10	45	56	55
August 1957	April 1958	1892	1900	8	39	49	47
April 1960	February 1961	1924	1934	10	24	32	34
December 1969	November 1970	2040	2051	11	106	116	117
November 1973	March 1975	2087	2103	16	36	47	52
January 1980	July 1980	2161	2167	6	58	74	64
July 1981	November 1982	2179	2195	16	12	18	28
July 1990	March 1991	2287	2295	8	92	108	100
March 2001	November 2001	2415	2423	8	120	128	128
December 2007	June 2009	2496	2514	18	73	81	91
1945-2009 Avg (11 cycles)				11.1	58.4	68.5	69.5
Note: Month numbers start in January 1800							

Source: National Bureau of Economic Research, “The NBER’s Business Cycle Dating Committee,” <http://www.nber.org/cycles/recessions.html>

The historical comparison between the 1973-1975 recession (Recession 6) and the 2007-2009 recession (Recession 11) is useful for several reasons. The most important non-economic correlation is that each occurred as the United States was finalizing over a decade of conflict, the

Vietnam War and the Iraq and Afghan wars, respectively. In considering the current debate over defense spending it is impossible to separate concerns and decisions from the demands on the military from two ten year wars, Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF). These conflicts have been a major driver of defense spending since 2001 and will require significant resources in terms of removal and refurbishment of military equipment, obligations to the troops who served as well as defense spending commitments to support host nation forces after American withdrawal. The severity of Recession 6, occurring as Vietnam wound down, provides a close parallel to Recession 11, the most severe since the Great Depression, in the wake of OIF and the drawdown from OEF. When eliminating other recessions as historical comparisons for this study, the international and national economic situations provided important contextual similarities.

Internationally, relevance of the recessions to one another lies in the realm of monetary policy. The financial burden of the Vietnam War was a major factor in the United States' withdrawal from the Bretton Woods system. The 1944 United Nations Monetary and Financial Conference adopted the Bretton Woods system, named for the site of the conference, to "establish international monetary and financial institutions to promote peace and prosperity" in the aftermath of WWII.⁹ The United States withdrew from the system in 1971 when President Nixon abandoned the gold standard, and the rest of the international community quickly followed suit. These events led to the "end of fixed monetary exchange rates, removal of the United States from the gold standard, and the ultimate death of the Bretton Woods system and its arrangement of international monetary management dating back to World War II."¹⁰ After the system dissolved, the United States faced economic hardship due to higher spending and inflation growth. This divides the post-WWII period into pre- and post-Bretton Woods blocks.

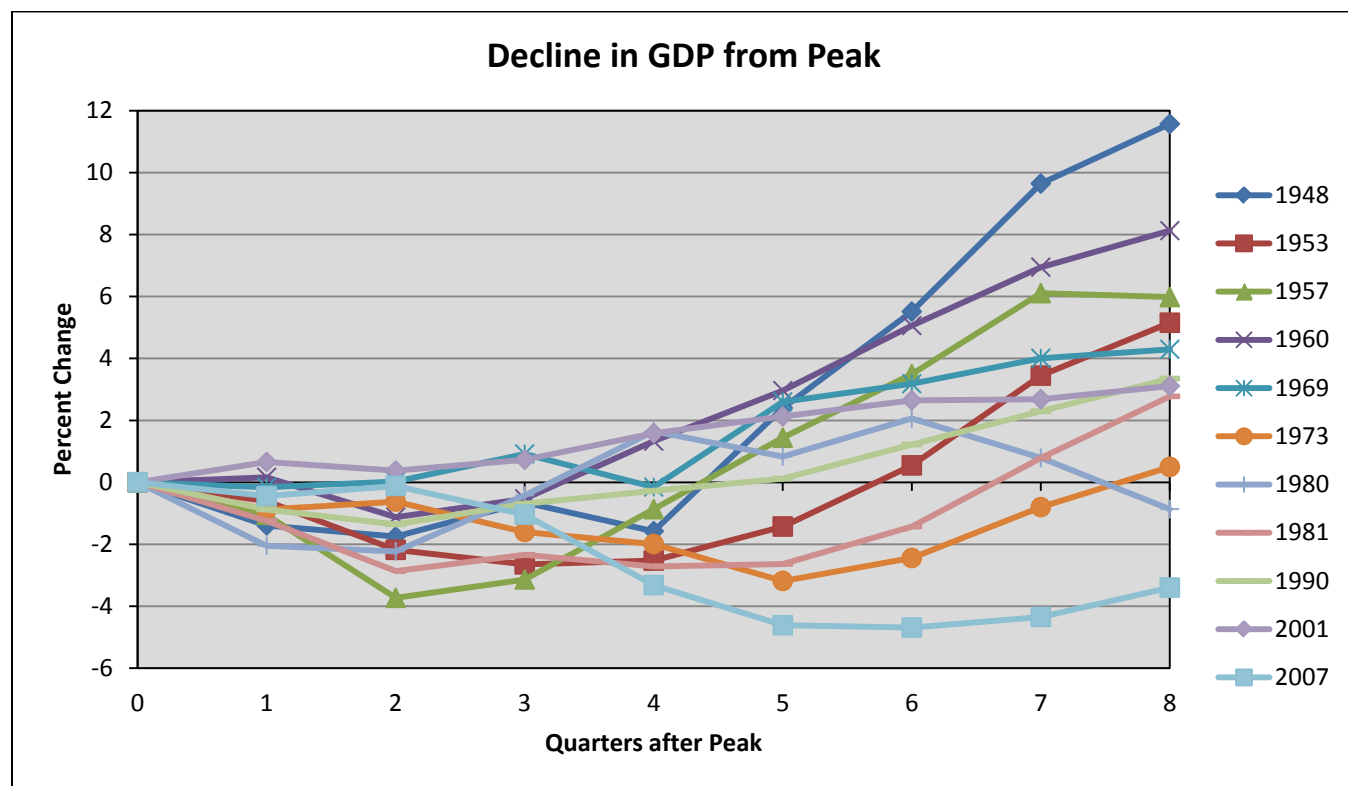
Identifying relevant historic periods to consider in the current fiscal challenges is problematic due to this major shift in America's economic foundation. The dissolution of the Bretton Woods agreement provides a solid line of demarcation when considering recessions after WWII.

Domestically, when considering other recessions that have occurred, the US economy from these two periods is historically the most similar. Both occurred after WWII and after Bretton Woods, as historical benchmarks, and among the eleven recessions identified by the NBER, Recessions 6 and 11 have the most similarities. The NBER identifies the 1973-1975 recession as lasting from November of 1973 to March of 1975 and the 2007-2009 recession December 2007 to June 2009, meaning a peak to trough period of 16 and 18 months, respectively.¹¹ Among other recessions post-Bretton Woods and WWII the NBER shows a peak to trough period of 16 months for the recession from July 1981 to November 1982. This is identical to Recession 6 except that it recession occurred a year after a smaller 6 month recession.¹² This study eliminated the 1981-1982 recession from consideration. The two recessions from the 1980's actually overlapped which makes it difficult to attribute conditions to a specific time period. Furthermore, neither of the recessions during the 1980s followed a period of extended military engagement.

Furthermore, the two recessions are more closely related than others are in the post-WWII era due to the changes in America's GDP (Figure 1). The GDP, as determined by the BEA and adjusted for inflation, dropped 3.2% during Recession 6 and 4.69% during Recession 11.¹³ Economist Maxwell Stewart, in describing the 1973-1975 recession, states that "not only was unemployment more severe than at any time since the Great Depression, but real wages declined as the nation's output of goods and services dropped sharply. Facing huge deficits, federal, state, and local governments began to curtail their services to the public."¹⁴ These issues

were also at the forefront of the American public during the Great Recession, which replaced the Great Stagflation as the most severe since the Great Depression. The only other recession that experienced a similar drop in GDP was the recession of 1957, which saw GDP drop by 3.1% while GDP dropped 2.6% during the 1981 recession. This study did not consider the 1957 recession since it occurred prior to the dissolution of the Bretton Woods system. Additionally, the 1957 recession occurred after the Korean War, which lasted three years as opposed to the longer conflicts of Vietnam, Iraq, and Afghanistan. The shorter duration of the Korean War precludes consideration of the 1957 recession in this study since the length of the Vietnam War is more similar to the Iraq War and the Afghan War.

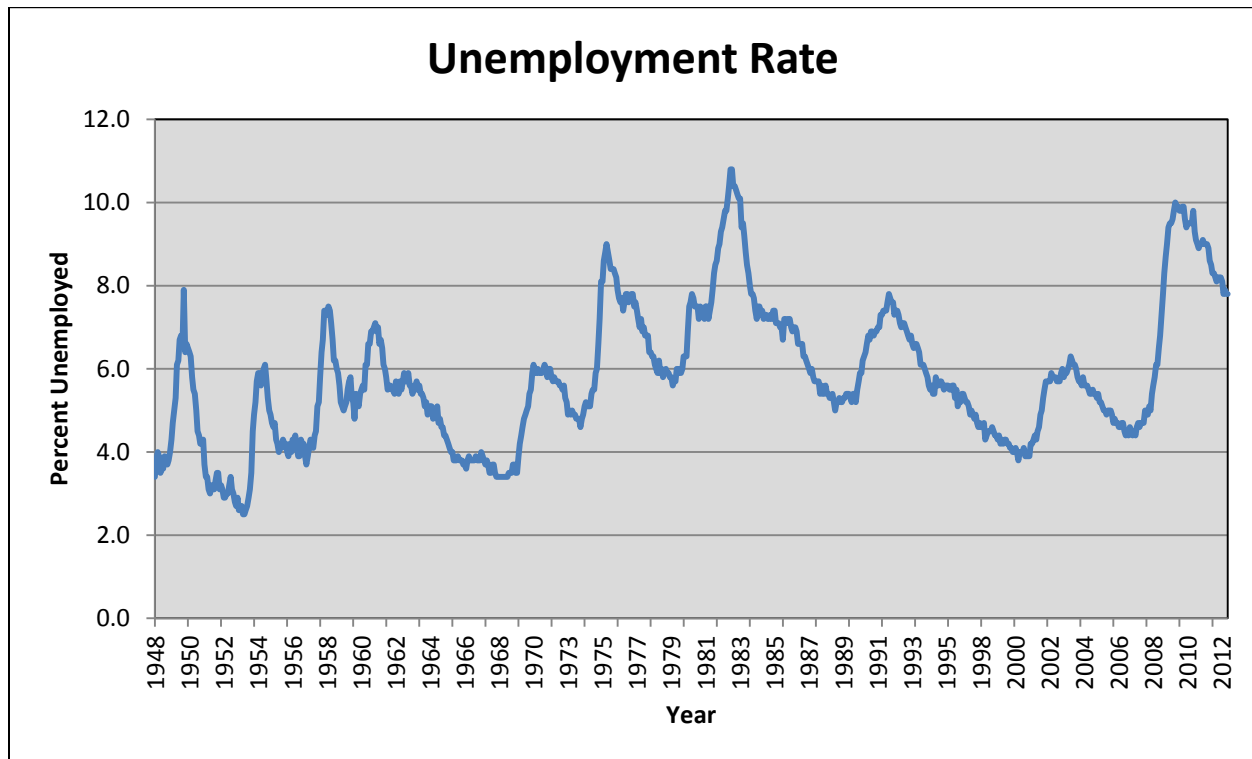
Figure 1 – Decline in GDP



Source: The Federal Reserve Bank of Minneapolis, "Historical Recessions and Recoveries Data," (http://www.minneapolisfed.org/publications_papers/studies/recession_perspective/index.cfm)

The unemployment rates at the trough of Recession 6 and Recession 11 were 8.6% and 9.5%, respectively.¹⁵ These rates do not reflect the unemployment caused by the recession but instead are the unemployment rates as determined by the Bureau of Labor Statistics (BLS) at the trough of the recession. Other recessions after WWII had a higher unemployment rate at their trough; however, those that did each showed a more rapid return to pre-trough levels.¹⁶ The recessions that experienced a similar rate of unemployment occurred in 1981. According to the BLS, the 1980 and 1981 recessions contributed to the highest rate of unemployment since 1948, 10.8% in November and December of 1982 (Figure 2).¹⁷ Using BLS data, the NBER shows employment during the 1980 recession as improving by 0.5% at the same time the 1981 recession was at the trough.¹⁸ However, this data is difficult to attribute to a single period of economic downturn due to the overlap of the two recessions in the 1980s. This makes it difficult to establish a correlation between the high unemployment and one of the recessions in the early 1980s. The unemployment rate is an indicator of economic health. The rate of unemployment (Figure 2) was at its highest during the 1980s recessions, with the Great Recession and the Great Stagflation having the next highest unemployment rates. Considering the exclusion of the 1980s recessions from this study, the high unemployment rates, as an indicator of severity of the recession, relate Recession 11 to Recession 6.

Figure 2 – US Unemployment Rate



Source: Bureau of Labor Statistics, "Labor Force Statistics from the Current Population Survey," (Unemployment Rate), <http://data.bls.gov/cgi-bin/surveymost?ln>)

From a DOD standpoint, the two recessions have a critical common element among post WWII recessions; both occurred during the era of an all-volunteer force (AVF). The military transitioned to an all-volunteer force on 1 July 1973.¹⁹ This commonality is a key similarity as it places each recession within the same framework of military personnel. The differences between a conscription force and an AVF are significant, including international practices, domestic perception, and the burden borne by service members as a cross section of society to name a few; however, the controlling issue when considering recessions is the cost differential. An AVF would require more funds, even at smaller levels than a conscripted force.²⁰ Transition to an AVF had a dramatic impact on the level of funding needed to sustain force level. The major driver of the discrepancy between the two force structures is the requirement for the DOD to compete with other employers to secure volunteers.

When comparing the recessions that occurred after WWII, the various methods of measuring their impact, and the context in which they occurred, the most closely related are the Great Stagflation of 1973-1975 and the Great Recession from 2007-2009. The economic and military similarities between the two periods make the defense spending decisions made after the former particularly relevant models when framing the current debate on defense spending. Within this economic framework of fiscal restraint and drawdown of extended combat operations, the defense budget has been the target for significant funding reductions.

Defense Drawdowns

The various private and public enterprises that monitor defense spending categorize it in two key ways – as a percentage of the federal budget and as a percentage of the GDP. This study uses the GDP as the metric for comparing national economic health between eras and the economic framework for DOD spending. Within this framework, DOD spending is separated into seven categories that comprise the DOD-Military budget: military personnel, procurement, RDT&E, O&M, military construction, family housing, and revolving and management (R&M) funds. The national defense budget is a combination of all DOD-Military funding as well as atomic energy defense activities and defense related activities. The DOD-Military component is by far the largest piece of the national defense budget, comprising approximately 98% of the national defense spending total from 1973-1978 and 96% from 2008-2012.²¹ The national defense budget is the largest discretionary component of the federal budget, and Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) have consumed a significant portion of the DOD's budget. As OIF and OEF come to an end there is a belief that the money spent on these operations will be directed towards domestic concerns, as was done post-Vietnam.

In the immediate aftermath of conflict, America often expects a peace dividend.²² The country expects money previously spent funding the military during the conflict to become available for other expenditures. This expectation, based on fallacious assumptions regarding the defense budget, has major implications on military readiness. For example, in the aftermath of Recession 6, some of these decisions caused what is commonly referred to as a “hollow force.” A hollow force is one that appears capable but suffers from a lack of manpower, equipment and training.²³ The peace dividend reaped after Vietnam led to a need for America to invest heavily in the military in the 1980s to compensate for the spending decisions of the 1970’s. As will be noted later, the military is currently devoting a smaller share of its resources to personnel in 2008-2012 than it did from 1974-1978. The consequences of the peace dividend led to the need for a major increase in defense spending under President Reagan. If the same changes made to a relatively smaller defense budget are the same as those made from 1974-1978 it is difficult to find a scenario in which the capabilities of the US military will not suffer.

As noted by former Secretary of Defense Robert Gates when considering current defense financial constraints:

I am determined that we not repeat the mistakes of the past, where budgets were met mostly by taking a percentage off the top of everything, the simplest and most politically expedient approach both inside the Pentagon and out of it. That kind of “salami slicing” approach preserves the overhead and maintains the force structure on paper, but results in a hollowing-out of the force from a lack of proper training, maintenance, and equipment-and manpower. That’s what happened in the 1970s-a disastrous period for our military-and to a lesser extent during the late 1990s.²⁴

In considering implications for current defense spending decisions, it is necessary to understand the current environment relative to that which produced the challenges faced by the military in the aftermath of Vietnam.

During the closing years of Vietnam, America underwent the Great Stagflation. In the aftermath of the Great Stagflation, the national defense budget in 1978 fell 0.6% from 1974

levels (Table 2). The national defense budget as a percentage of the total federal outlay for the period and the national defense budget relative to the GDP reflect a shift in national priorities.

The growing GDP, flat national defense budget, and growth in federal spending via the Great Society efforts of President Johnson all indicate the search for a peace dividend and a desire for elected leaders to use government funds to reflect national feelings about Vietnam.

Table 2 – 1974-1978 National Economy and Defense

	GDP (\$ billions)	Federal Deficit (\$ millions)	Federal Deficit as % of GDP	National Defense Budget (\$ million)	National Defense Budget as % of Federal Outlays	National Defense Budget as % of GDP
1974	\$1,438.5	\$6,135	0.43%	\$79,347	29.5%	5.52%
1975	\$1,560.2	\$53,242	3.41%	\$86,509	26.0%	5.54%
1976	\$1,738.1	\$73,732	4.24%	\$89,619	24.1%	5.16%
TQ	\$459.4	\$14,744	3.21%	\$22,259	23.2%	4.85%
1977	\$1,973.5	\$53,659	2.72%	\$97,241	23.8%	4.93%
1978	\$2,127.5	\$59,185	2.78%	\$104,495	22.8%	4.91%

Source: U.S. Office of Management and Budget. *Fiscal Year 2013 Historical Tables Budget of the U.S. Government*, (Washington, DC: Government Printing Office, 2012)

Reflecting America's financial priorities, the country devoted nearly 7% less to national defense five years after the recession started and three years after the Vietnam War ended. The American economy, as measured by GDP grew 47.9% over the same five-year period, not counting for inflation. The relative growth of the economy drops to 11.8% when adjusted for inflation, 2.36% per year from 1974-1978.²⁵ This increase is significant when viewed against the actual decline in real spending on national defense, -0.6%, when adjusted for inflation.²⁶ The decline in real spending on defense during and following a recession where real economic growth was just over 2% per year due to inflation is symptomatic of national priorities shifting to adjust to difficult economic times and the search for a peace dividend after more than ten years of war. In the aftermath of the Great Stagflation, the economy grew more while defense

spending decreased. Conversely, after the Great Recession the economy grew less while defense spending increased by almost 10%.

As the military began the process to withdraw from Iraq and drawdown in Afghanistan, America underwent the Great Recession, the worst financial period since the Great Depression. From 2008 to 2012, the GDP (in billions of dollars) rose 2.1% from \$15,285.9 to \$15,601.5 in 2012 dollars.²⁷ This growth is slightly lower than the growth in the economy from 1974-1978. However, spending on defense during the second period, in 2012 dollars, grew 9.6% whereas it declined from 1974-1978. The growth in national defense spending contributed to the increase in the federal deficit relative to GDP. This increased spending has helped drive the recent growth in the federal deficit and is part of the justification for reduced defense spending in the current economic climate.

From 2008-2012 the federal deficit was, on average, 7.9% of the GDP. This is in stark contrast to the period from 1974-1978. From 1974-1978 the federal deficit, as a percentage of GDP averaged 2.77%.²⁸ The federal budget for both eras grew. However, relative to the GDP, from 2008-2012 the money spent was a result of increasing the federal deficit while resulting in relatively lower military funds. Deficit spending is currently a major concern for policy makers and the policy makers of the 1970's faced similar challenges despite the relatively low deficit relative to the country's economic output. In a 1975 economic colloquium on American economic policy, economic analyst and advisor Albert Sommers commented on the \$125 billion federal deficit saying "are these deficits disastrous...or are they simply normal for a recessionary period at a time when the GNP, at more than \$1,400 billion, totals about 23 times the annual size of these deficits?"²⁹ These national economic conditions are the framework when considering federal spending and its largest discretionary component, the defense budget.

Table 3 – 2008-2012 National Economy and Defense

	GDP (\$ billions)	Federal Deficit (\$ billions)	Federal Deficit as % of GDP	National Defense Budget (\$ million)	National Defense Budget as % of Federal Outlays	National Defense Budget as % of GDP
2008	\$14,334.4	\$458,553	3.2%	\$616,073	20.7%	4.3%
2009	\$13,937.5	\$1,412,688	10.1%	\$661,049	18.8%	4.7%
2010	\$14,359.7	\$1,293,489	9%	\$693,586	20.1%	4.8%
2011	\$14,958.6	\$1,299,595	8.7%	\$705,625	19.6%	4.7%
2012 (est)	\$15,601.5	\$1,326,948	8.5%	\$716,300	18.9%	4.6%

Source: U.S. Office of Management and Budget. *Fiscal Year 2013 Historical Tables Budget of the U.S. Government*, (Washington, DC: Government Printing Office, 2012)

In the aftermath of Recession 11 the 2012 (est) GDP in billions of dollars, when adjusted for inflation, was \$14,630.39 in 2008 dollars.³⁰ This is real GDP growth of just 2.06% over five years. Over the same period, the national defense budget, adjusted for inflation, grew 9%. As a percentage of total federal outlay from 2008-2012 the national defense budget averaged almost 20%.³¹ From 1974-1978, the national defense budget averaged nearly 25% of the total federal outlay.³² The military of the OIF and OEF era has spent less of America's money than after Vietnam, a period of some of America's most precipitous defense cuts and politicians are demanding further cuts.

Considering the American strategic climate of each period, the Cold War in a period of détente and post-9/11 is important. Each climate facilitated recognition of the need for a robust military, one capable to supporting national priorities. However, this desire was insufficient to protect the military from major funding reductions; the national economy was a higher priority. Unfortunately, these actions are fraught with challenges economic and military – what level of capabilities does the nation require and can they be funded and if not how much risk should nation bear because of the current economic climate.

In the five years from 1974-1978, the American economy grew nearly 10% more than it did from 2008-2012. At the same time, spending on national defense stagnated, whereas it grew 9% from 2008-2012. The growth in the American economy, in conjunction with the inverse levels of national defense spending drives the discrepancy between the relative allocations of American resources to national defense during the two periods. In terms of American investment in national defense, military personnel are one of the most sensitive areas due to the immediate impact on service members. As such, the military personnel budget component should be carefully evaluated for judicious cuts lest the remaining elements of military spending be cut excessively to the detriment of the armed forces capabilities.

Military Personnel

The current discussions regarding the size of the Armed Services and the various levels and methods of compensation for service members, as targets for budget cuts in a restrained fiscal environment are nothing new. In a Senate Armed Services Committee hearing on the FY 1975 defense budget request, Secretary of Defense James Schlesinger addressed concerns over the growth in the budget request from 1973. The \$6.3 billion increase from the 1974 request, and \$12 billion increase from 1973 were “almost wholly consumed by pay and price increases.”³³ As noted previously the shift to an AVF is major component in the increasing share of military personnel of the DOD budget. “The military share of GNP requires further adjustments because of structural changes in the military, in particular, the shift from a drafted to an all-volunteer army.”³⁴ Much of the compensation discrepancy between a conscripted force and the AVF is because the DOD is “at a disadvantage in competing for enlistees and reenlistees whose abilities or skills command a premium wage in the open market.”³⁵ This is as true today as it was at the start of FY 1974 when the military completed the transition to the AVF,

evidenced by the increases in military compensation and benefits needed to attract and retain quality service members.

Table 4 – 1974-1978 Military Personnel Spending

Year	1974	1975	1976	TQ	1977	1978
BA (\$ millions)	\$24,167	\$24,963	\$32,192	\$8,495	\$34,075	\$35,724
Outlay (\$ millions)	\$30,409	\$32,162	\$32,564	\$8,268	\$33,672	\$35,553
Outlay as % of BA	125.8%	128.7%	101.2%	97.3%	98.8%	99.5%
% DoD Outlay	38.2%	37.7%	36.3%	37.1%	34.6%	34.0%

Source: U.S. Office of Management and Budget. *Fiscal Year 2013 Historical Tables Budget of the U.S. Government*, (Washington, DC: Government Printing Office, 2012)

The DOD's 1974 BA, in millions of dollars, for military personnel was \$24,167³⁶, 38.2% of all DOD spending (Table 4). For the 1974-1978 period it accounted for an average of nearly 36% of all DOD spending. Conversely, DOD outlays for military personnel account for over 22% of the DOD's budget from 2008-2012. The relative cost of military personnel during Recession 11 is significantly lower when compared to the portion devoted to military following Recession 6, the current force structure is much smaller than post-Vietnam but the per capita expense is higher. This trend is indicative of funding decisions made to improve the military's efficiency in terms of turning dollars into fighters, seeking develop a greater personnel capability for a small investment. However, as seen in the concerns from decision makers the higher level of spending from 1974-1978 was not enough to avoid a hollow force. Secretary Schlesinger, in a 1973 Senate hearing on the FY 1974 DOD budget request, addressed committee concerns over spending and the overall budget. Secretary Schlesinger informed decision makers that economic relief at the expense of DOD is unrealistic due to shift in resources and decline in purchasing power and increased manpower costs.³⁷ Further to the point of limited relief from reducing

numbers and a shift to the AVF model, “although there is a decline of some 38,000 military and civilian personnel between 1975 and 1976, manpower costs will increase by some \$2.4 billion to a total of about \$50 billion.”³⁸ This force reduction is minimal compared to the 1.4 million personnel reduction between 1968 and 1975. Despite this massive reduction, in the aftermath of Vietnam and the Great Stagflation, the DOD spent over a third of its money on military personnel and still fielded a hollow force structure over the subsequent decade. Costs, today as then, continue to grow requiring more money to fund the same force. Truly draconian cuts to other DOD funding components would be required to offset the ever-increasing costs of military personnel even as the military continues to reduce its force structure.

The other perspective at the time is evident in Senator Symington’s concerns from the FY 1974 DOD funding request Senate hearings. “Reasonable estimates indicate that the cost of the military retirement system could well range from 24-35 billion by the fiscal year 2000.”³⁹ This concern is part of the larger issue of military compensation and the need to compete with other employers in the AVF era. The debate continues today as policy makers consider reductions to the DOD budget with Secretary Gates noting that “rising personnel costs could dramatically affect the readiness of the Department”⁴⁰ in a 2010 Senate

Table 5 – 2008-2012 Military Personnel Spending FY 13 Historical Tables

Year	2008	2009	2010	2011	2012 (est)
BA (\$ millions)	\$139,031	\$149,290	\$157,102	\$158,389	\$158,448
Outlay	\$138,940	\$147,348	\$155,690	\$161,608	\$156,185
Outlay as % of BA	99.9%	98.7%	99.1%	102%	98.6%
% DoD Outlay	22.6%	22.3%	22.5%	22.9%	21.8%

Source: U.S. Office of Management and Budget. *Fiscal Year 2013 Historical Tables Budget of the U.S. Government*, (Washington, DC: Government Printing Office, 2012)

The DOD outlay for military personnel in 1968 was \$25,188,000,000 compared to \$32,162,000,000 in 1975. “Military personnel were reduced by 1.4 million, from 3.5 million in 1968 to 2.1 million in 1975.”⁴¹ In 1968, \$25.2 billion paid for 3,547,000⁴² service members. When normalized to 1968 prices the 1975 outlay was \$20,803,670,000 or 59.97% of the 1968 military personnel outlay.⁴³ 82.59% of the 1968 budget (\$20.8 billion) in 1975 paid for 2,127,000⁴⁴ service members, or 60% of the 1968 force. This discrepancy can be partially attributed to legislation in the interim authorizing such items as an increase in military compensation, however, the drastic difference in compensation required by an AVF as opposed to an conscription force is a major factor in the levels of expenditures on military personnel since 1973. Secretary Schlesinger addressed the reductions in the number of service members since the 1968 peak. “It is argued that numbers of conventional forces are not relevant and that sizeable reductions can be made...it is NOT true that size is irrelevant.”⁴⁵ The real concern over the drastic reductions in force size as well as the relative costs of those forces and the Secretary’s concerns were borne out in the hollow force in the aftermath of the cuts described above. In seeking to balance economic constraints and a military drawdown, the military ended up spending over a third of its budget on a hollow force.

The issue of how the budgeting process accounts for military personnel spending is another component of the spending debate over military personnel. In terms of federal budget discussions, the way money is allocated and authorized impacts how it is attributed in budget breakdowns. During the Secretary of Defense’s 2010 Budget Recommendation before the Senate Committee on Armed Services, Dr. John Hamre, President and CEO of the Center for Strategic and International Studies pointed out a legislative failure of the budget. He stated that “we do not budget real cost growth for personnel and yet we know for 100 years that personnel

costs go up 1.5 percent a year”⁴⁶ Using the 1.5% annual growth in cost for military personnel, costs will increase 6% from 2012 to 2016. Over that period, Army reductions in troop numbers amount to 4.9% from 2012 levels, 1.7% for the Navy, 9.9% for the USMC and no reduction for the Air Force.⁴⁷ These reductions do not offset the real cost of the 6% increase, not including any changes in purchasing power due to inflation. Growth in the funding requirements to sustain the force is a budget component that, as a major portion of the DOD budget, will have to be addressed when considering DOD funding reductions. In the 2012 publication, *DOD: Defense Budget Priorities and Choices*, the DOD states that the decreasing manpower in return for money spent is an ongoing issue. “Including wartime funding or OCO appropriations, military personnel costs have doubled since 2001, or about 40% above inflation, while the number of full-time military personnel, including activated reserves, increase by only 8%.”⁴⁸ There are also the implicit opportunity costs, “if money is wasted to pay for unnecessary manpower, it will not be available to pay for improved equipment and readiness of the forces.”⁴⁹ The current path of defense spending, seen in the 2008-2012 budgets should cause decision makers to pause when applying further cuts to military personnel funding. The DOD is devoting fewer resources to its service members while attempting to avoid a hollow force. Unfortunately, budget planners must consider significant changes when balancing the personnel element of defense spending since the cuts from 1974-1978 left a hollow force and the DOD is facing steeper cuts now than in the aftermath of Vietnam. The implications are not just about spending money on those who volunteer to serve, the money Congress authorizes for military personnel impacts the funds devoted to the second budget component, procurement.

Procurement

Procurement is the second DOD-Military budget component examined. DOD planners and Congress frequently look to procurement when considering budget cuts due to the relatively expensive acquisition programs that fall under this budget authority. Another appealing aspect of procurement cuts is that “to secure sufficient personnel for the Armed Forces, the Department must provide a compensation package comparable and competitive in the private sector while at the same time balancing the demands of an All-Volunteer Force in the context of growing equipment and operations costs.”⁵⁰ It is often easier for lawmakers to cut and trim programs that will not show a payoff for several years than to reduce the compensation to volunteers serving their country. Thus, procurement programs are often the target of spending cuts due to the long procurement cycle. For example, the DOD procurement plan for the F-35 calls for acquisition of 2,456 jets, with 131 purchased from 2007-2012.⁵¹ Reducing the DOD budget by cutting the number of ships acquired or a vehicle that will not be available for three years helps protect lawmakers from claims of disregard towards military service members the way cuts to the military personnel authority would. A program that spans over decade is an easy target for short-term financial savings. An *Overview of the 1976 Budget* notes that shipbuilding, for example, was “particularly susceptible” to the effects of the recession due to the long time frame required in shipbuilding projects.⁵² Unfortunately, the search for short-term gains has long-term ramifications.

The DOD’s 1974 budget authority for procurement was 24% lower than in 1978 when adjusted for inflation.⁵³ Over the same period the DOD spent less than allocated on procurement (Table 6). In 1974, DOD spent nearly 90% of its authorized procurement funds, comprising roughly 19% of the DOD outlay. By 1978 procurement spending still accounted for

roughly 19% of the DOD outlay, however, this required only 68% of BA outlay, compared to 90% just five years earlier. As the American struggled in the aftermath of the Great Stagflation, the DOD actually spent slightly less, when accounting for inflation in 1978 than in 1974. These figures provide insight into the budgetary mindset of the DOD. In struggling to maintain force levels, procurement spending suffered as a result.

Table 5 – 1974-1978 Procurement Spending

Year	1974	1975	1976	TQ	1977	1978
BA (\$ millions)	\$17,028	\$16,698	\$20,991	\$4,135	\$27,992	\$29,529
Outlay (\$ millions)	\$15,241	\$16,042	\$15,964	\$3,766	\$18,178	\$19,976
Outlay as % of BA	89.5%	96.1%	76.1%	91.3%	64.9%	67.6%
% DoD Outlay	19.2%	18.5%	17.8%	16.9%	18.7%	19.1%

Source: U.S. Office of Management and Budget. *Fiscal Year 2013 Historical Tables Budget of the U.S. Government*, (Washington, DC: Government Printing Office, 2012)

The DOD's 2008-2012 procurement outlay consumed, on average, 4% more of the total DOD outlays than during 1974-1978. In 2012, the DOD estimates it will exceed its procurement authority by 16.1% (Table 7). Procurement after the Great Recession accounts for approximately the same percentage of DOD outlays as military personnel, whereas after the Great Stagflation, procurement accounted for 18% less of DOD outlays than military personnel. The military of the 1970s devoted a third of its funds to build a hollow force and procurement suffered. Today the DOD is attempting to spend relatively less on military personnel through a smaller force structure while sustaining a procurement process to meet the demands of the rebalancing towards the Pacific. These decisions reflect the increasing reliance of the military on equipment to function as a force multiplier. To maintain the same military strength while fielding a smaller force the DOD needs the advanced platforms that facilitate this strategy.

Table 6 – 2008-2012 Procurement Spending

Year	2008	2009	2010	2011	2012 (est)
BA (\$ millions)	\$164,992	\$135,439	\$135,822	\$131,899	\$120,516
Outlay (\$ millions)	\$117,398	\$129,218	\$133,603	\$128,003	\$139,869
Outlay as % of BA	71.2%	95.4%	98%	97%	116.1%
% DoD Outlay	22.6%	22.3%	22.5%	22.9%	21.8%

Source: U.S. Office of Management and Budget. *Fiscal Year 2013 Historical Tables Budget of the U.S. Government*, (Washington, DC: Government Printing Office, 2012)

However, as seen in Table 6, increasing the DOD BA for procurement does not necessarily translate to greater levels of spending. The DOD’s consistent inability to spend the authorized procurement funds stems from the long and unsettled procurement process. In a Senate Armed Services Committee Hearing on the DOD’s FY 1974 budget, Defense Secretary Richardson stated that efforts were underway to extend the planning horizon past 5-8 years to better “assess the longer-term costs of proposed new weapons systems and their potential impact on the future size of the force structure. By doing so, we believe it may be possible to improve the near-term allocation of our R&D and procurement resources.”⁵⁴ If the spending decisions from 2008-2012 are any indication, that effort failed. Current defense budgeting constructs use a six-year extension known as the Future Year Defense Program (FYDP) to forecast planning decisions, the same concept employed by the DOD under Secretary Richardson. This is a particularly challenging institutional construct when facing financial constraints. A six-year program began in 2006 for example would be the target of deferred funding, as the DOD sought to meet immediate demands for spending cuts. The issue with the procurement process is that the deferments increase DOD obligations over the long term since the procurement plans calls for the same result, just over a shorter period – or a higher cost per unit if DOD must cut the

program in the future. The procurement process needs to be adjusted to better account for the long nature of the programs it supports and protected from spending cuts that are so severe that the long-term result is a force with old and out of date equipment and technology. This issue was identified but not addressed in the first era; current economic constraints may be the necessary catalyst for addressing the issue and improving the procurement process. The issue of long timelines and financial obligations are not limited to the procurement process. DOD's RDT&E component is also subject to the same challenges, however, with even greater uncertainty as to the return on investment.

RDT&E

The third element of the DOD budget this paper examines is RDT&E. In a 1974 hearing before the Senate Armed Services Committee, Secretary of the Air Force John McLucas stated, "a vigorous research and development program is required to maintain an overall military balance in the modern world and to minimize the possibility of technological surprise."⁵⁵ One of the most significant facets of the DOD budgets, RDT&E is often used to compensate for the America's relative lack of manpower in the services, as compared to the standing armies of Russia and China. Dr. Malcolm Currie, director of Defense Research and Engineering, noted that our national security could not rely on unlimited manpower or natural resources. It "must be based on our ability to multiply and enhance" those resources available to the nation.⁵⁶ The goal of RDT&E must be to provide the most capable technology and equipment to a force with a procurement process that sustains equipment demands for sufficient numbers of troops to meet the security challenges America faces.

While procurement spending fell short of BA from 1974-1978, RDT&E was much closer to the authorized BA (Table 6). Just as with procurement, the DOD spent less on RDT&E in

1978 than in 1974 when adjusted for inflation. Unlike procurement however, the long-term implications for RDT&E cuts are harder to assess. Procurement programs buy things over time, which is relatively easy to track. RDT&E is a different story; there is no definitive product or quantity for planners to use as a definitive measure of success. Some technology may require billions of dollars to develop, only to reach a point where the reality of technical or financial limits cause the program to be abandoned, such as the United States Marine Corps Expeditionary Fighting Vehicle (EFV). While the DOD cancelled the EFV, there is no way now to know whether the research conducted during its early phases and continued during the initial procurement, prior to cancellation, might prompt future innovations in military technology.

Table 7 – 1974-1978 RDT&E Spending

Year	1974	1975	1976	TQ	1977	1978
BA (\$ millions)	\$8,176	\$8,572	\$9,451	\$2,406	\$10,439	\$11,371
Outlay (\$ millions)	\$8,582	\$8,866	\$8,923	\$2,206	\$9,795	\$10,508
Outlay as % of BA	105%	103.4%	94.4%	91.7%	93.8%	92.4%
% DoD Outlay	19.2%	18.5%	17.8%	16.9%	18.7%	19.1%

Source: U.S. Office of Management and Budget. *Fiscal Year 2013 Historical Tables Budget of the U.S. Government*, (Washington, DC: Government Printing Office, 2012)

The DOD spent a larger portion of its budget on RDT&E from 2008-2012 than it did from 1974-1978, while as noted previously, less on military personnel. When accounting for inflation however, the 2012 RDT&E outlay will be 5% lower than in 2008. With increases in procurement and military personnel (although lower than procurement) spending RDT&E is shouldering much of the DODs recent budget cuts. Even so, the DOD outlay is projected to exceed its 2012 RDT&E budget authorization (Table 7) by approximately the 5% is real budget cuts. This will likely not be the case as the DOD never exceeded its BA for RDT&E over the

2008-2011 period. Instead, RDT&E will be a prominent target for further budget cuts due to the nebulous effects of a reduced RDT&E budget.

Table 8 – 2008-2012 RDT&E Spending

Year	2008	2009	2010	2011	2012 (est)
BA (\$ millions)	\$79,568	\$80,004	\$80,232	\$76,688	\$71,902
Outlay (\$ millions)	\$75,120	\$79,030	\$76,990	\$74,871	\$75,904
Outlay as % of BA	94.4%	98.8%	96%	97.6%	105.6%
% DoD Outlay	22.6%	22.3%	22.5%	22.9%	21.8%

Source: U.S. Office of Management and Budget. *Fiscal Year 2013 Historical Tables Budget of the U.S. Government*, (Washington, DC: Government Printing Office, 2012)

The amount of money spent on RDT&E in a constrained fiscal environment has been a concern for decision makers in both eras. Chairman McIntyre, in a 1975 Senate Hearing noted that the FY 1976 budget marked the first \$10 billion RDT&E request. The chairman stated that the rising costs of sustaining the US military, including RDT&E, “coupled with anticipated Federal budget deficits in excess of \$50 billion, unemployment rates approaching 8 or 9 percent, and sky-high inflation...are stretching the vast capabilities of the United States to the breaking point.”⁵⁷ This concern is reflected in the RDT&E reductions; however, RDT&E is often seen as a force multiplier, the way to maintain a volunteer force facing ever-increasing manpower costs.

“The American problem with technology is actually more of a surfeit of riches...the difficulty is that these advanced technologies are both extremely expensive and extremely complex”⁵⁸ This truism about most military technology is the impetus behind its appeal as a target for spending cuts. The nature of RDT&E makes it a prime target for funding reductions. Similar to procurement authorizations, RDT&E promises uncertain returns for the money invested and is more palatable to politicians than cutting service member compensation and

exposing themselves to accusations of lack of concern for those in uniform. The amount of money required in the budgeting process to develop technologies that potentially will not see the battlefield for ten years or more make allocation of limited resources a source of contention among military planners and budget makers. In the same 1975 Senate Hearing on RDT&E, Senator Dominick commented that RDT&E seemed subject to duplication, driven in part by service parochialism.⁵⁹ Programs such as the F-35 seek to address this concern, yet, the F-35 is the most expensive DOD project ever. While addressing the issues of duplication and parochialism, budget concerns are forcing the military to delay the program and thus fielding a less capable force. Current planners must consider the impacts of how their 1970s counterparts sought to balance these competing demands on a limited budget as personnel costs continue to increase and programs like the F-35 and the cancelled EFV require large financial commitments for uncertain returns.

Many view duplication of effort as the enemy to efficiency; however, since passage of the Goldwater-Nichols Act in 1986 the services have striven to meet the specified demands for a more integrated US service structure. Goldwater-Nichols can trace its roots back to the first period when Senator Goldwater, in 1974, lamented the divided nature of the armed services during testimony before the Senate Armed Services RDT&E Subcommittee.⁶⁰ In the modern era, efforts by the military to comply with Goldwater-Nichols and improve efficiency have produced efforts such as the JSF and creation of such concepts as joint professional military education. Efforts like these highlight the recognition with the DOD, forced by Congress, that there is a limited amount of money to spend and that collaborative efforts facilitate a greater return on money spent. However, despite these efforts the military is devoting a larger portion of its budget to RDT&E than before the passage of Goldwater-Nichols. This is not necessarily a

negative development. As the force levels fall RDT&E is means to maintain military strength with fewer service members. Unfortunately, as the DOD faces budget reductions it appears that RDT&E funding cuts will continue. Due to the relatively minimal immediate impact of such cuts RTD&E is a convenient target for cuts, decision makes must bear in mind the potential impact of cuts to the portion of the budget that maintains military capabilities in the coming era of reduced force structure. In the aftermath of the Great Stagflation the DOD had to adjust to reduced financial means. Now the DOD faces a similar challenge, increasingly expensive procurement project, the result of massive RDT&E expenditures to outfit and sustain personnel who require more and more of the DODs shrinking resources.

Comparing Defensive Eras

One of the most frequent admonitions made to someone seeking a solution to a problem is to consider what has happened before – those who forget history are doomed to repeat it. The financial decisions at the Federal level from each era contain similarities that shape the debate over the DOD component of the Federal budget. During the Nixon and Johnson Administrations, social spending increased at the same time that Vietnam required greater resources be allocated to the military. Unfortunately, this led to an untenable national fiscal environment and forced Johnson to seek increased tax revenue and reductions in social spending. “The tax cuts and spending increases, were wildly popular and could sail through Congress; the tax increases and spending cuts were a hard sell.”⁶¹ Much of the same concerns plague decision makers today as sequestration and mounting debt drive reductions to the defense budget. The military must meet the demands of the nation as the nation gives less money with which to meet them.

In his book *Funding Extended Conflicts*, Richard Miller described Vietnam as a “heightened period of escalation [that] was overlaid on an aggressive domestic agenda that competed for resources.”⁶² Miller’s comment would be equally applicable to the American environment surrounding OIF and OEF and the Great Recession. Each conflict has generated significant debate. A few concerns are whether they were justified, to how they were conducted, and whether the money spent should have been spent in America. These concerns echo those voiced about the Vietnam War. Each period was subject to its own unique challenges and friction points; however, there are many key similarities that make defense spending in the aftermath of Vietnam and the Great Stagflation a useful historical example for DOD budget planners in the era of OIF and OEF and the Great Recession.

In 2012, the director of the CBO described historical spending trends and targeted the 1970-1979 period when the defense budget purchasing power declined 25% and procurement dropped 55%.⁶³

Trends in discretionary outlays during the past few decades have been heavily influenced by spending on defense. In 1971, defense discretionary outlays accounted for 7.3 percent of GDP; however, that share fell rapidly over the following several years, dropping to 4.7 percent of GDP by 1978.⁶⁴

These trends continue today as defense spending comprises roughly the same portion of the total federal budget as it was from 1974-1978, the low point detailed above. With defense spending currently at levels comparable to the 1970s, the impending cuts mandated by sequestration as well as the generally restrictive American economic climate could have devastating effects on the DOD’s ability to support national priorities. The CBO director addressed this issue, stating, “even if budget authority for defense programs (other than overseas contingency operations) grew at the rate of inflation, that amount of funding would be insufficient to pay for the Future Years Defense Program (FYDP) provided to the Congress in April 2011 by the Department of

Defense.”⁶⁵ Current defense planners are building a military of the future that Congress will not have the money to authorize.

Application to the Current Debate

Congress and military decision makers must remember that the military is an “instrument of a national policy...laid down by a democratically elected government.”⁶⁶ This Clausewitzian observation emphasizes the political military hierarchy; the government will make the policy and allocate funds to support the military as needed to achieve the policy objectives. The military will request the funds it deems necessary to fulfill its role; however, this is a request only, and the DOD requests over the coming decade will likely exceed Congressional authorizations.

One of the challenges the DOD faced post-Vietnam was the expectation of cuts to the defense budget equivalent to the money spent on the war. Several issues made this a difficult expectation for the DOD to meet. “First, without a precise estimate on what was really spent on Vietnam from inside the budgets, it was naturally difficult to determine how much correspondingly could be taken out. Second...the hidden costs of items deferred, program reductions, and schedule slippage required additional funds when conflict ended.”⁶⁷ The overseas contingency operations (OCO) category of the 2008-2012 DOD budgets has made it easier to get an accurate of the costs of OIF and OEF. However, the OIF and OEF will produce hidden costs much the same as Vietnam. There is little indication that the American taxpayer will not expect a similar peace dividend, nor that the DOD will be any more capable of providing such financial relief without significantly degrading the services. The DOD currently projects that “total US defense spending, including both base funding and war costs, will drop by about 22% from its peak in 2010, after accounting for inflation.”⁶⁸ However, the DOD must justify to the public why that 22% will not translate directly to increased funds for other government

programs. The OCO category, while improving the DOD's financial transparency, also makes it easier for the public to estimate the costs of war and demand a corresponding peace dividend of their elected officials.

Spending on military personnel is a major budget authority and the DOD, correctly, is striving to avoid the hollow force fallout produced by budget cuts in the 1970s. According to the 2012 publication, *DOD: Defense Budget Priorities and Choices*, the department says that compensation and benefits are 1/3 of defense budget but comprise 1/9 of budget reductions.⁶⁹ This decision to focus budget cuts on other areas is in recognition that previous drawdowns tried to maintain more force structure than budget could afford.⁷⁰ While in keeping with senior defense official's desire to maintain faith with the force, a significant portion of the budget cuts must therefore fall under the procurement and RDT&E authorities. Cutting personnel is a fact for the military over the FDYP; however, these cuts will have a relatively small impact on defense spending. Since 2001, when excluding OCO funding, personnel costs have increased 90% against personnel increases of just 3%. Savings garnered from the military personnel authority cannot rely on troop reductions to save money; the compensation of those troops must be adjusted to achieve national objectives and Presidential mandates. Increasing service member contributions to the benefits received should impart financial savings as well as forcing a sense of accountability for benefits received.

Additionally, the removal of the Congressional authorizations that expanded and drove the massive increase in entitlement spending must be considered in order to preserve other DOD funding authorities. The FY 2012 budget proposed increasing member contributions toward TriCare, the DOD health care system. This increase, along with other efficiency initiatives, will save nearly \$6.9 billion over the FYDP. This is a significant amount of money, roughly 8.8% of

the total FYDP savings, from just the military health benefits. However, \$6.9 billion over five years is only 14.2% of the FY 2013 budget request for the military health system. Additionally, these savings will not impact the money budgeted for military personnel, as the health system falls under O&M authorities. The underlying issue behind the costs of health care is the level of entitlement authorized to service members in return for their dedication. Careful evaluation of the level of entitlement compensation is necessary if military personnel spending is to deliver some of the savings mandated by the fiscally austere environment.

In the 2010 Secretary of Defense Budget Recommendations before the Senate Armed Services committee, Dr. John Hamre, described the historical impact of defense cuts and current concerns that reductions to procurement funding would reach the point where DOD would be unable to “hold competitions for weapons systems.”⁷¹ This is a major concern in an era when military systems are increasingly expensive and complex. The inability to solicit competitive bids for a specific type of product could negatively influence the quality of a military system by not subjecting it to the rigors of a competitive marketplace. Without the element of competition, there is the prospect of a platform that may not be as capable as one that had to compete to be the choice of the armed forces. Additional concerns over reductions to procurement lie in the requisite investment in older platforms to bridge the gap before new equipment takes its place. Investing limited resources in older platforms is a short-term cost control measure, eventually equipment must be replaced, and the further down road planned procurements are pushed the more expensive they become. The DOD is implementing joint efforts to accommodate procurement difficulties, such as streamlining its airlift fleet. Efforts like this reflect recognition that a multifaceted approach is necessary to realize the necessary cost reductions while fielding a force able to support national objectives.

DOD planners should also consider efficiencies and joint development initiatives to maximize the return on DOD money spent on RDT&E. The FY 2012 DOD budget projects efficiency savings of \$2,110 million from the RDT&E authority based on the FYDP from the FY 2011 budget. These cuts stand in stark contrast to Secretary Gates' desire in 2009 to increase RDT&E by "\$1 billion over the next 5 years for fundamental, peer-reviewed basic research-a 2 percent increase in real annual growth."⁷² The elimination of the 2% real growth in RDT&E projected through 2013 results in a FY 2013 budget that projects an 8.0% reduction from 2011 levels in RDT&E. These levels drop RDT&E spending to 2% of national defense spending, the lowest percentage since 1953. RDT&E is a critical component of America's national defense strategy and often relied upon as a force multiplier. Cuts to the levels of 1953 are fraught with implications of a less capable RDT&E component of the military and industry. Institutionalizing a greater level of RDT&E efforts within DOD to take greater advantage of the expertise of those in uniform would reduce the support required from private industry while eliminating cost drivers inherent in federal contracts, such as change orders. Furthermore, as RTD&E spending from the 1970s shows, the long-term payoff is worthy of steady funding authorizations. Several critical technologies utilized today were developed during the period, including the F-18 as well as Navy and Air Force cruise missiles. While not every technology DOD funds will produce a usable product, the current trend towards historically low RDT&E levels pose a potential threat to military readiness from a technological perspective well beyond the FYDP. The long delay between investment and return, however, means that budget cuts in the short term could have drastic effects in the end.

Conclusion

America is facing a severely constrained economic environment. In adjusting to this reality, the federal government is targeting the largest discretionary expenditure, the DOD, for budget cuts. DOD's budget faces 10% cuts over the next decade, not including sequestration. This is not a completely new situation. Reductions in federal spending often target DOD's budget and the situation from the 1970s is a period current planners should study as they consider how to maintain a capable force in an austere environment. Three components of the DOD budget that have significant parallels across both eras and drive much of the DOD's spending are military personnel, procurement, and RDT&E. Spending on military personnel consumes much less currently than from 1974-1978, the period that preceded the hollow force military of the late 1970s and early 1980s. In light of recent spending cuts and the demands placed on the DOD budget due to entitlement programs for military personnel, sustaining a capable force should be a major concern to DOD planners and Congress. Ensuring that every service member receives sufficient support to recognize and reward their sacrifice without unduly constraining the rest of the DOD to support them in America's next war is a major task for the DOD and Congress. Maintaining, and thus financing, robust procurement and RDT&E capabilities within the defense establishment are critical components to maintaining a strong and well-equipped military. Procurement and RDT&E spending are integral components of a strong military. The relative reductions to procurement from 1974-1978 to 2008-2012 pose major challenges as the DOD faces acquisition of expensive platforms and developing the technologies needed to meet potential future threats. In terms of DOD budget challenges and the national economic climate, the period from 1974-1978 offers significant similarities to 2008-2012, making the first era an

informative case study for Congress and DOD budget planners across the military personnel, procurement, and RDT&E DOD budget components.

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²² Senate Armed Services Committee, *The Secretary of Defense's 2010 Budget Recommendations*, 111th Cong., 2009, Committee Print, 9.

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